Amendment to the Abstract:

Please amend the Abstract as follows below:

The invention relates to a systems Systems for magnetic resonance imaging (MRI), such systems face an additional contribution to the inhomogeneity of the radio frequency (RF) (\underline{B}_1) field when high magnetic fields are applied. The invention-tries to \underline{To} improve the homogeneity of the RF field for high field strengths, particularly for field strengths at or above 3 tesla. To improve the homogeneity, an electrically conducting material (4) is positioned within the cavity (2) of the system. The material has a conductivity and a thickness which ensure that the total radial conductance in an xy-plane perpendicular to the symmetry axis of the cavity becomes \underline{more} isotropic.